## CORRESPONDENCE

PROFESSOR R. KOCH'S ADDRESS. Sir,—My remarks after Dr. Koch's address at the Tuberculosis Congress last Tuesday were made at very short notice, and the summary of them which you kindly published on Saturday was written very hurriedly, and there is one point of considerable importance in the latter which I should be glad,

with your permission, to correct.

I stated that when the mesenteric glands are found affected with tubercle, without any discoverable intestinal lesion, in children that have died of tubercular disease, and no tubercle is met with in other parts of the body, the natural, and, indeed, inevitable conclusion seemed to me to be that "the tubercle bacilli had passed from the aliment through the intestinal mucous membrane without causing obvious lesion in it and had been arrested by the mesenteric glands." If for "the aliment" I substitute the alimentary canal, I express what I believe to be the true state of the case.

The intestinal contents consist, of course, not only of the food more or less altered, but also of the secretions of the various glands which pour their products into the alimentary canal. One such product is the bronchial mucus which, together with the dust of the inhaled air, is brought up by the cilia to the orifice of the larynx and perpetually swallowed unconsciously. The inhaled dust thus enters as truly into the composition of the intestinal contents as does the food; and in the case of a child fed on unboiled milk from a cow with a tuberculous udder in a room infected with tubercle, it might be fairly open to question whether the bacilli of bovine tubercle imbibed at its meals or those of human tubercle derived indirectly from the inhaled air were the more numerous in its intestine. Hence the fact of the mesenteric glands being the only seat of tubercle in a milk-fed child is no proof that the bacilli which they contain were derived from the milk. This consideration may seem in favour of Koch's hypothesis; but it, in truth, deprives his argument based on the rarity of primary tubercular intestinal lesions in the child, in spite of the multitudes of bovine tubercle bacilli swallowed in milk, of any relevancy whatever; because, considering the extremely numerous bacilli of human tubercle often present in the intestinal contents, the argument might be used with equal force against the possibility of comparison to the strength of the strengt bility of communicating human tubercle to man.

The truth appears to be that the intestinal mucous memof tubercle bacilli. This is manifest if we consider that, according to the experience of pathologists, only about two-thirds of the bodies of those who have died of pulmonary tuberculosis have tubercular lesions of the intestines. Or, to put it otherwise, the intestines of one-third of such patients have resisted the invasion of tubercle bacilli passed through them for months, or it may be for years, in enormous numbers in the swallowed expectoration. In the child the intestinal mucous membrane seems to allow the bacilli to pass through it more readily than in the adult; but even in the young child pathologists seem agreed that pulmonary tubercle is much more common than tabes mesenterica, although, as we have seen, the infecting dust passes through the intestine after its inhalation

into the lungs.

Dr. Koch has shown that human tubercle is very rarely, if ever, transmissible to the bovine species. But of the converse proposition, incomparably the more important, that bovine tubercle is not communicable to man, there is, I venture to think, no reliable evidence.—I am, etc.,

Park Crescent, W., July 30th.

LISTER.

SIR,—I desire to call attention to an apparent omission in that portion of Dr. Koch's address, in which he deals with the results of his experimental feeding of swine with bovine tuberculosis. The animals, he says, which "had eaten bacillist had without expensions." of bovine tuberculosis, had without exception.....tuberculous infiltration of the greatly enlarged lymphatic glands of the neck, and of the mesenteric glands, and also extensive tuber-culosis of the lungs and spleen." But although the swine had been infected by the method of feeding no mention is made as to whether tuberculous lesions of the intestine were found in

any of the experimental animals.

This omission appears the more remarkable seeing that in discussing the reasons for his assumption that bovine tuberculosis cannot be conveyed to man by the ingestion of milk or butter containg "living and perfectly virulent bacilli," Dr. Koch makes the definite assertion that it is "only when the intestine suffers first" that a case of tuberculosis can be assumed with certainty to have been "caused by alimenta." It may be that although in Dr. Koch's address as reproduced in the British Medical Journal no mention of the fact is made, nevertheless tuberculous lesions of the intestine were really present in addition to those which he enumerates, but in view of the importance which Dr. Koch evidently attaches to this condition in the case of man the publication of full details of the post-mortem examination of these pigs would be of considerable interest.—I am, etc.,

Earl's Court, July 30th. S. Monckton Copeman.

THE NOTIFICATION OF TUBERCULOSIS.

Sir,-I am unfortunate in your reporter not hearing my remarks on Tuesday, July 23rd, at the meeting of Section I of the Tuberculosis Congress. What I stated was not in accordance with your report. It should have read: "Voluntary notification was not successful in the absence of any fee for notification, and a single circulation of educational pamphlets dealing with the measures to be taken to prevent the spread of tuberculosis had not produced the results hoped and expected." I gave no reason for compulsory notification; quite the contrary: I stated I was not in favour of compulsory notification, and continued my speech by pointing out how voluntary notification could best be effected, and the necessity for voluntary notification carrying the usual fee. I concluded by drawing attention to the great advantage gained for the signal of the state of for those interested in the subject by the article in the July number of *Tuberculosis* on "Disinfection after Phthisis," as affording, with all the weight of the National Association for the Prevention of Tuberculosis at its back, the necessary final dogmatic statement in a now complete series when urging local authorities to take measures to prevent the spread of tuberculosis.—I am, etc.,

Kensington, July 29th. HERBERT ALDERSON.

THE TRANSMISSION OF TUBERCLE FROM ANIMALS TO MAN.

SIR,-With regard to Professor Koch's statement as to the transmission of tubercle from cattle to man, it is very interesting to note that the Jews have always taken it for granted that such transmission does occur. A cow, however slightly diseased, is at once condemned.—I am, etc.,

G. Arbour Stephens.

THE C.O.S. OF LONDON.
SIR,—This "big question" occupied twelve columns of printed matter in the British Medical Journal on Ju'y 6th, to-day two columns, which is below the average weekly output.

For thirty years I have taken part in the action of the Obstetrical Society, and I am indeed loath to add a word to a discussion which is already too long, and is only kept alive by constantly raising fresh issues. Those who do not yet know what they want never will. Opposition there is to all things, and differences of opinion about most.

The letters L.O.S. were adopted by the holders of certificates and freely used but never constituted by the Obstatrical

and freely used, but never sanctioned by the Obstetrical Society. When it was discovered that L stood for licentiate as well as London, objections were raised, showing how obstetrical Society will express itself about this in its own way, and I am not authorised to make any statement.

If every woman is to have a doctor as well as a nurse in-

stead of a midwife, which is the alternative suggested by the opposition, may I ask who is to pay? If the public will have to be taxed, the idea is not worth consideration, and we might as well unite forces and agree to pass a Midwives Bill

as perfect and as soon as possible.

To Mrs. Colby I may say that 25 cases was reduced to 20, which is the requirement of the College of Physicians and

College of Surgeons for medical students, because it was felt that more should not be required of midwives.

The obstetrical examinations have proved an immense success; otherwise no one would trouble about them. For twenty years no one raised any objection to them. The Jubilee gave an immense impulse to nursing and to nurses, and of course midwives were no exception. In my humble opinion the nurse who is responsible for the poor mother and her babe at such a time should not take a "back place." In the interests of the poor I have always done all in my power to improve the midwife. I have not considered her as an opponent, nor in any way on the same plane with the humblest practitioner, but as a thing apart and necessary (good or bad) in thousands. It is untrue to suggest that self-interest has influenced anybody. When a Midwives Bill becomes law the whole affair will be taken over by the State, and yet the Obstetrical Society does not stand in the way, but is in favour of

legislation.
To "F.R.C.S." I would point out that the percentage of failure is higher now than in 1895, but the increase of candidates has steadily gone up: 1895, 432; 1896, 467; 1897, 511; 1898, 590; 1899, 688; 1900, 842 candidates, 119 failures, 18 absent; that is, 408 increase in five years.

I have no intention to enter into any discussions, and am leaving England in a few days for some weeks, so this must be my last letter.—I am, etc.,

Seymour Street, W., July 27th.

PERCY BOULTON, M.D.

## THE INCIDENCE OF GASTRIC ULCER IN THE TWO SEXES.

SIR,—My attention has been drawn to a very important mistake in a letter of mine published by you in the BRITISH MEDICAL JOURNAL for December 1st, 1900, vol. ii, p. 1613. In that I am made to say that during the last five years there had been 15 cases of gastric ulcer verified by necropsy at the General Hospital, and of these 11 occurred in men and 4 in women. This statement is the exact reverse of the truth, as the detailed list I now enclose shows, the truth being that of the 15, 11 occurred in women and only 4 in men. The whole point of my communication was to show that post-mortem data confirm the usual clinical experience in this respect. As these figures have been quoted recently, my attention has been drawn to them, and I am therefore bound to ask you to permit me to correct the mistake.—I am, etc.,
Riemingham July 20th. ROBERT SAUNDBY.

Deaths from Gastric Ulcer from Medical and Surgical Post-mortem

	negisters. 1895-1900 inclusive.
Medical, 1897-1900	None.
,, 1896	Rowland Morris Ulcer of stomach; nephritis.
,, ,,	Henry Manning Perforated ulcer of stomach.
", 1895	Elizabeth Duff Perforated gastric ulcer.
Surgical, 1900	$\dots$ — Schoffeld (female) ,, ,, ,,
Surgical, 1900	Emily Bretherton ,, ,, ,,
,, ,,	Joseph Cook Ulcer near pylorus; no rup-
	ture; gastro-jejunostomy.
,, 1899	Kitty Southey Gastric ulcer.
. , , , , , ,	Emma Cutter Perforated gastric ulcer.
,, 1898	Helen Crowthan
",	Mary Dowton Gastric ulcer; hæmorrhage.
" "	Elizabeth Roberts Perforated gastric ulcer.
,, 1896	Louisa Bird Gastric ulcer; peritonitis.
,, 1895	William Chance Perforated gastric ulcer.
", ",	Annie Hudson ,, ,, ,,
, ,,	Mary Dedsbury ,, ,,
•	15 cases—11 females, 4 males.

VACCINATION AND PROFESSIONAL UNDERSELLING. SIR,—With Dr. Major Greenwood's views on the above subject, as expressed in the British Medical Journal of July 27th, I feel sure everyone will agree to a large extent. But I think few will agree when he deprecates the action of the private practitioner, who merely sticks to his own patient, and vaccinates the latter at the fee he was accustomed to charge prior to the passing of the last Vaccination Act, rather than let his patient fall into the hands of perhaps a rival practitioner who happens to be a public vaccinator. If anyone has a right to complain it is the private practitioner against the public vaccinator, and not vice versa.

So strongly were the seductive methods of some public vaccinators felt in this district after the passing of the Act of 1898, and so keen was the resentment against the unwarranted action of some of them, that the "Bradford and West Riding Medical Union" felt compelled to take action and issue a "Memorandum to Public Vaccinators" containing "suggestions" for their guidance, if they wished to act ethically as well as legally.

The text of these suggestions may be seen in the British Medical Journal of July 15th, 1899, p. 155.

To me, too, Dr. Major Greenwood's terms seem unjust. For how can one be said to be "underselling" a public vaccinator when one simply continues to charge the same fee for vaccination. nating as one was accustomed to charge before public vaccinators were paid on the present scale? Here the usual charge used to be 2s. 6d. for working people, but since calf

lymph has become general it has been mostly raised to 3s. 6d.

Of course, it would be more altruistic to hand over to the public vaccinator all that cannot afford to pay 6s., and not only give the public vaccinator an introduction to some fresh

prospective patients, but be oneself spared the indignity of taking a 3s. 6d. fee.

This altruistic ideal does not, however, appeal to everyone, and some may even think it more profitable to do the vaccination gratis, and keep the public vaccinator out of their national borness alterations.

patients' houses altogether.

To secure the harmonious working of the present Vaccina-tion Act, it appears to me that one of two things should be done: either that every medical practitioner be made a public vaccinator and be paid by the authorities on the present scale for what vaccinations he performs, or else that special public vaccinators be appointed in all densely populated areas who shall be debarred from taking part in private practice at all.

The present method does and will continue to produce friction so long as men are what they are.—I am, etc.,
Bradford, July 29th.
WILLIAM MITCHELL, M.B.

Bradford, July 29th.

SIR,—As a private practitioner I certainly cannot agree with the remarks made by Dr. M. Greenwood in the BRITISH MEDICAL JOURNAL of July 27th. He says, "I allude to the almost universal custom of private doctors consenting to vaccinate their patients at a lower rate than that paid to the public vaccinator of the district. Surely this ought not to be." The expense to the ratepayers of the town in which I live for vaccinations performed by the public vaccinators last year was £1,600, and the cost of each vaccination performed by them worked out at 11s. 6d. per case. Surely Dr. Greenwood would not suggest that a private practitioner should charge a fee of this magnitude. charge a fee of this magnitude.

I charge 2s. 6d. for vaccination done at my house, and this consider to be a reasonable fee. I make two marks, but as I believe that four are more effectual than a lesser number. I always make them of such a length that their actual surface is at least equal to four circular ones. Thus the patient is

satisfied and my conscience is clear.

To my mind the most effectual method of dealing with this subject would be to appoint every medical man a public vaccinator at a fee of 58. per case. This would prevent friction arising between the public vaccinator and his fellow practitioners. Were private practitioners to agree not to vaccinate at a lesser fee than that received by the public vaccinator, as suggested by Dr. Greenwood, I fail to see who but the public vaccinator would be a giner by such an arrangement. vaccinator would be a gainer by such an arrangement.—I am,

July 20th. L.R.C.P.

SIR,—Most practitioners will agree with Dr. Greenwood's general statement in reference to professional underselling, but in the particular instance of vaccination his remarks call for criticism.

The average amount of work per case performed by a public vaccinator is considerably greater than that performed by a private practitioner. The public vaccinator has to visit each private practitioner. The public vaccinator has to visit each case of actual vaccination at least twice, he pays many visits which are fruitless from one cause or another, and he has no inconsiderable amount of "office" work to get through in sending out preliminary notices and in filling up the various registers he is required to keep. The private practitioner, on the other hand, can vaccinate at his own residence, and, generally speaking, his expenditure of time and trouble is less altogether. Why were the fees of public